

Appln No.: 10/661,444
Amendment Dated: November 2, 2005
Reply to Office Action of August 9, 2005

REMARKS/ARGUMENTS

This is in response to the Office Action mailed August 9, 2005 for the above-captioned application. Reconsideration and further examination are respectfully requested.

Claims 11-19 have been added. The Commissioner is authorized to charge any fees due as a result of this amendment to deposit account no. 15-0610.

Claims 11 - 19 are supported in the original application *inter alia* as follows:

Claim 11: ¶ 006 and claim 6.

Claims 12 and 16: ¶ 036

Claims 13, 14 and 17: Examples, ¶ 039.

Claim 15: Claim 2

Claims 18 and 19: ¶ 048

The specification has been amended to add the disclosure of original claim 6 and the ranges from the examples to the description of the invention at ¶ 028.

Claims 2 and 5 has been amended in view of the examiner's remarks on Markush language and antecedent basis.

The Examiner rejected claims 1, 2, 3, 4, 8, 9 and 10 under 35 USC § 103 as obvious over Adams '812 in view of Mori et al ('804'). The Examiner states that Adams teaches a pressurized container made of reinforced polyesters. Applicants respectfully point out, however, that the Adams container is not a container for liquids with a carbon dioxide content, for example carbonated beverages, but rather a container for gases, or cryogenic gases. Furthermore, the Adams container is not a "reinforced polyester" as that term is used in the present application, because the fiber layer in Adams is a separate layer around the inner polymer layer. Thus, Adam's is non-analogous art both with respect to the present invention, and with respect to the Mori reference with which the Examiner seeks to combine it. Thus Applicants submit that this rejection should be withdrawn.

The Examiner also rejected claims 5-7 as obvious over the combination of Adams, Mori and Duse. Again, Applicants submit that the Adams reference is not appropriately relied upon.

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Assuming that the Mori and Duse references are considered without Adams, they still do not suggest the claimed invention. The Mori reference teaches containers that are formed from biaxially-oriented polyesters which contain a surfactant material. The bottle itself, without the surfactant, is said to be disclosed in US Patent No. 3,733,309 and to have reduced permeability to gases such as oxygen and carbon dioxide. (Col. 1, lines 14-20). No specific values for permeability are provided in the Mori patent, and the '309 patent refers to permeability when filled with carbon dioxide gas, not a carbonated liquid. However, the permeability that is achieved is attributed to the biaxial orientation of the polyester in the bottle.

Duse teaches as a first matter the general unsuitability of adding fiber reinforcing at any significant level to materials that are to be stretched and blown to produce biaxially oriented products. (See for example, Col. 1, line 65 Col. 3, lines 20). The Invention disclosed in Duse is the discovery that fibers with specific properties can be introduced into bottles, like that of Mori, that are biaxially oriented and achieve increases in strength when the amount of fibers is only 0.3 to 5%.

The present invention is different from Mori and Duse. First, as would be apparent to a person skilled in the art from the methods described in ¶ 029-033, the containers of the present invention are not biaxially oriented. Because of this, the problems attributed by Duse to use of high fiber levels in biaxially oriented polyesters are not observed. On the other hand, at the higher levels of fibers, Applicants have found that the fibers themselves actually contribute to the reduction in gas permeability as well as to the strength of the container , and thus achieve materials that have superior performance.

In this regards, Applicants note that the bottles of the '309 patent (and thus of Mori) have creep properties which are substantially worse than the present bottles. In particular, the bottles of the '309 patent show creep of less than 5% after 90 days (Col. 16, line 71-.Col. 18, line 1). In contrast, the bottles of the present invention have creep less than 3% after half a year, i.e. less creep in twice the time. (¶ 35) Creep reflects the gas permeability of the bottle, and thus its shelf life with respect to the loss of carbon dioxide content. To further demonstrate the importance of the addition of fibers to the creep rate, Applicants attach a declaration under Rule 132.

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For these reasons, Applicants submit that all of the claims of this application are in form for allowance. Favorable reconsideration is respectfully requested.

Respectfully submitted,



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Attachment:

Declaration Under Rule 132

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